

# **In-house EVM Workshop**

**Defense Systems Management College**

Ft. Belvoir, Virginia

June 22-23, 1999

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# ***Objectives***

- Identify issues and obstacles to the effective use of EVM on in-house projects
  - Develop list of recommendations and solutions
- Share best practices and lessons learned

# ***Agenda***

## **Day 1 – Tuesday, June 22, 1999**

Opening remarks and administrative information	8:00 – 8:15
OSD Perspective – Gary Christle	8:15 – 9:00
“A View from the Field” – selected speakers	9:00 – 10:00
Break	10:00 – 10:15
Form topic discussion groups	10:15 – 10:30
Topic discussions	10:30 - 11:30
Lunch – Ft. Belvoir Officers Club	11:30 – 1:00
Topic discussions	1:00 – 4:30
Daily wrap-up	4:30 – 5:00



# ***Agenda - cont.***

## **Day 2 – Wednesday, June 23, 1999**

Topic discussion	8:30 – 11:30
Lunch - roundtable software discussion	11:30 – 1:00
Topic discussions	1:00 – 2:00
Break (reconvene in Bldg. 292)	2:00 – 2:15
Topic debriefs	
# 1 Validation and Surveillance – Bill Gibson	12:15 – 2:45
# 2 Implementation Considerations – Tom Bryant	2:45 – 3:15
Break	3:15 – 3:30
# 3 Accounting Systems – Mark Zenthoefer	3:30 – 4:00
# 4 Data Analysis and Training – Susan Wood	4:00 – 4:30
Wrap-up	4:30 – 5:00

# ***Other Activities***

## ■ Tuesday - Luncheon Presentation

- Speaker: Rob Robbins (F-14 PMO)
- Place: Ft. Belvoir Officers Club
- Time: 11:30- 1:00
- Cost: \$12.50 for all-you-can-eat buffet

## ■ Wednesday - SW Roundtable Discussion

- Host: Dave Melton
- Place: Classroom #73, Building 207
- Time: 11:30 - 1:00
- Lunch available at the cafeteria in Building 207

# ***Administrative Information***

## ■ Messages

- Voice messages: 703-805-2848
- Email messages: [waelchli@dsmc.dsm.mil](mailto:waelchli@dsmc.dsm.mil)
- Faxes: 703-805-3184

## ■ Cafeteria

- Located in Building 207
- Hours: 6:30 AM to 1:30 PM daily



# ***Earned Value***

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**A Manager's Tool for Integrated  
Cost, Schedule and Technical  
Performance Management**

***OUSD(A&T)SA/PM***



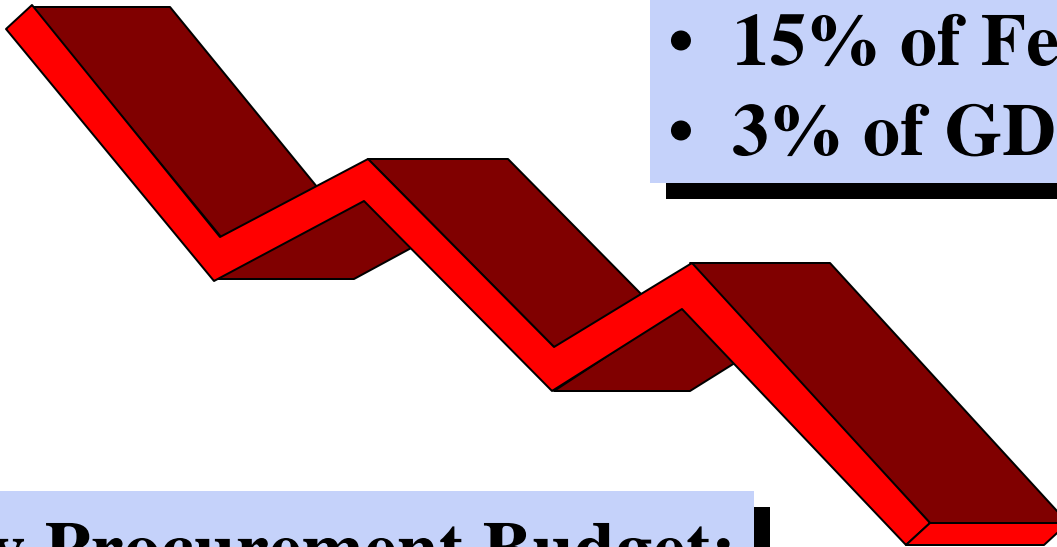
## 1961 Pentagon Spending:

- 40% of Federal Budget
- 8% of GDP

## 1997 Pentagon Spending:

- 15% of Federal Budget
- 3% of GDP

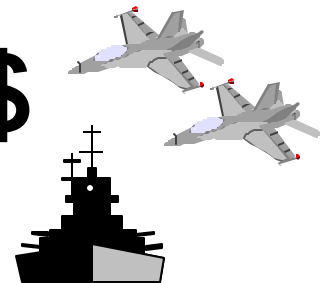
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## Military Procurement Budget:

- Down 67% since 1985 peak
- \$60 Billion goal

\$



*The 1990's - Shrinking Industrial Base*

Lockheed  
GD Mil. Jets  
Sanders Assoc.



**Lockheed**

Martin Marietta  
GD Rockets  
GE Aerospace



**Martin Marietta**

Loral  
Unisys Defense  
IBM Fed. Systems  
LTV Missiles  
Ford Aerospace  
Goodyear Aerospace



**Loral**



**Lockheed Martin**

Northrop  
LTV Aircraft  
Grumman  
Westinghouse Def



**Boeing**  
**Rockwell Def & Space**  
**McDonnell Douglas**



**Northrop Grumman**

Boeing  
Rockwell Def & Space  
McDonnell Douglas  
Raytheon  
E-Systems



**Raytheon**

Texas Instruments Def  
Hughes Aircraft  
Magnavox Def  
CAE Link  
GD Missiles



**Hughes Aircraft**



**Raytheon**

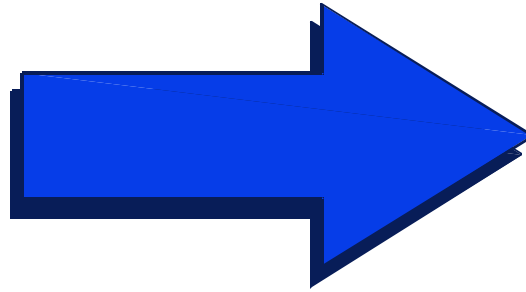


# Reengineering EVMS

## October 1993 - A Vision



**Inspection**



**Management**



# Earned Value Management: Implementation Problems

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- “Financial Management”
- Audit-like reviews
- **Reporting** focus
- Too many “surprises”
  - ◆ **A-12** (Navy)
  - ◆ **AAWS-M** (Army)
  - ◆ **C-17** (Air Force)
- Challenge: **keep good principles, stop bad practices**





# Lesson of the A-12

The “Beach” Report, A-12 Administrative Inquiry, 28 Nov 1990

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- Too often, earned value insights remain the sole province of the supporting program control staff of both contractors and the government.
  - ◆ Earned value must be an **integral** part of the performing design and manufacturing organizations.
  - ◆ Only when **program technical staffs** are held accountable for earned value analysis, will they begin to understand its implications.

# **The Need For Change:**

## **C/SCSC never had a chance!**

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- **RFP Review Results 1991 - 1993**
- **Significant misapplication of requirements**
  - ◆ 50% have WBS problems
  - ◆ 75% have excessive variance reporting requirements

# *Unnecessary Cost*

**December, 1994, Coopers & Lybrand/TASC Study:**

**“The DoD Regulatory Cost Premium:  
A Quantitative Assessment”**

**and**

**COST/SCHEDULE CONTROL SYSTEMS  
(C/SCS)**

# ***C&L/TASC Cost Drivers:***

## ***Cost without a requirement***

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- **Total DoD Cost Premium is 18%**
- **C/SCS Cost Premium is 0.9%**
  - ◆ Nearly 3/4 is in Eng'g/Prog Mgmt
    - Written control account variances
  - ◆ Most of Remainder is in administrative and external reporting activities

# Good idea, bad implementation

## (C&L/TASC Cost Drivers)

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- “In general, **industry views** the general framework and principles of cost/schedule reporting **positively**.
- However, all contractors subject to C/SCS agree that, **as currently required** by DoD, cost/schedule reporting is **too detailed, repetitive, and voluminous** to be used effectively as a management tool by either the government or industry...”

# The paradigm must change

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- **EVMS** reporting system is of little value;
- **Program Management**, not audits;
- **The Vision:**
  - ◆ The quality of a contractor's management system is determined
  - ◆ not by the absence of defects,
  - ◆ but by the presence of management value.

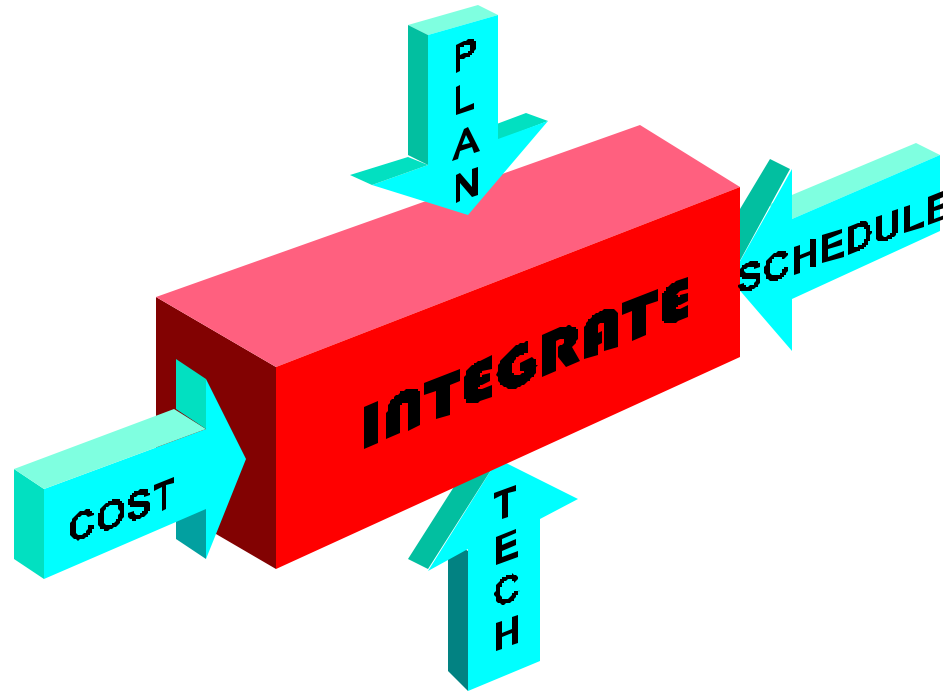
# Services & industry Challenged Implement “Model Program”

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- Initiated Oct 93
- Shift Ownership From Financial Management to **Program Management**
  - ◆ Change emphasis from government system to contractor systems
  - ◆ Reduce the review burden
  - ◆ Limit reporting
  - ◆ Ensure comprehensive **planning** and common understanding of the task
  - ◆ **Integrate** cost, schedule, technical performance, and risk management

# The Acquisition Executives Take Charge

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**INTEGRATED PROGRAM MANAGEMENT INITIATIVE**

**September 1994**



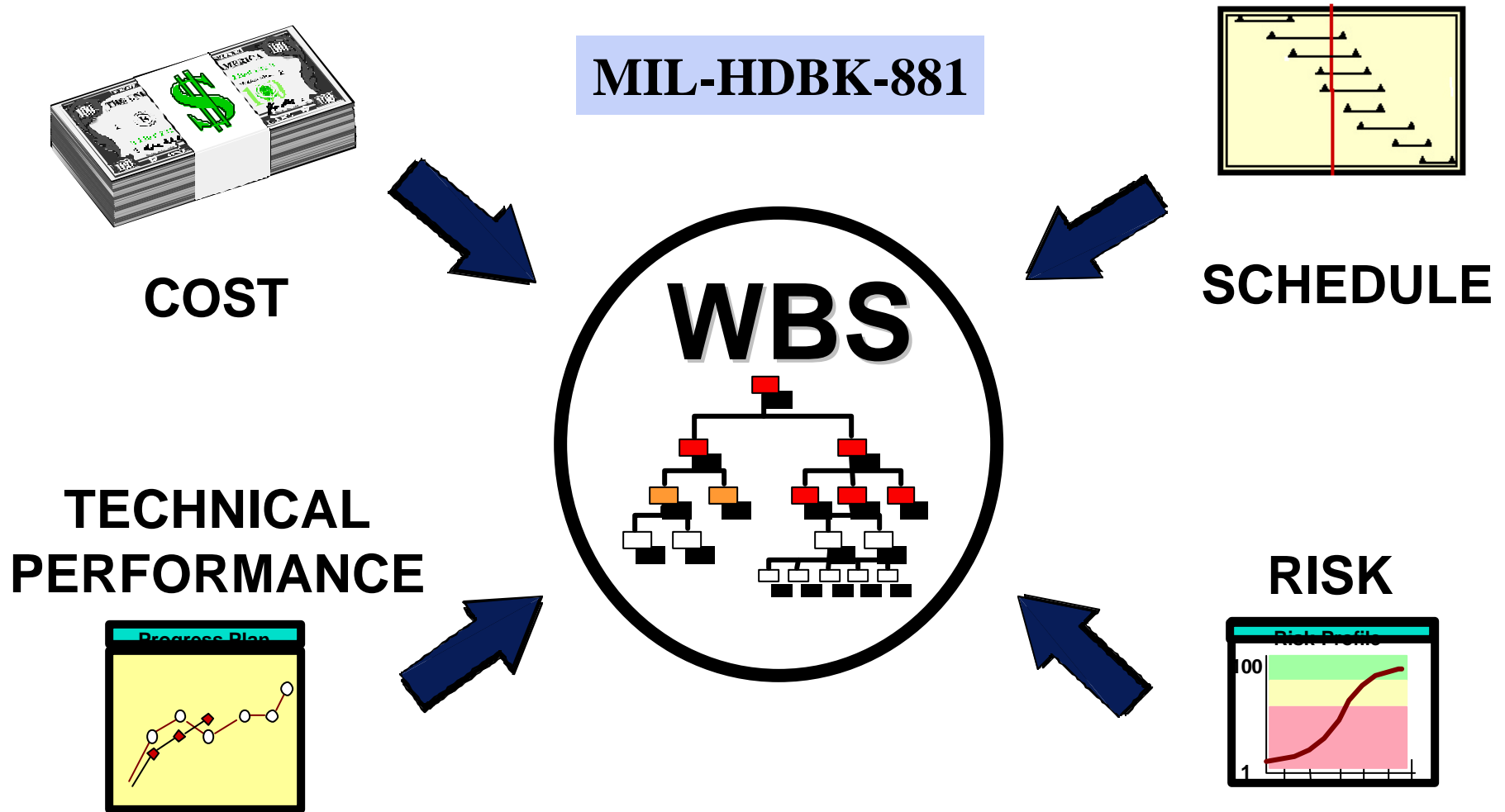
# **Key Building Blocks**

## **Integrated Program Management Initiative**

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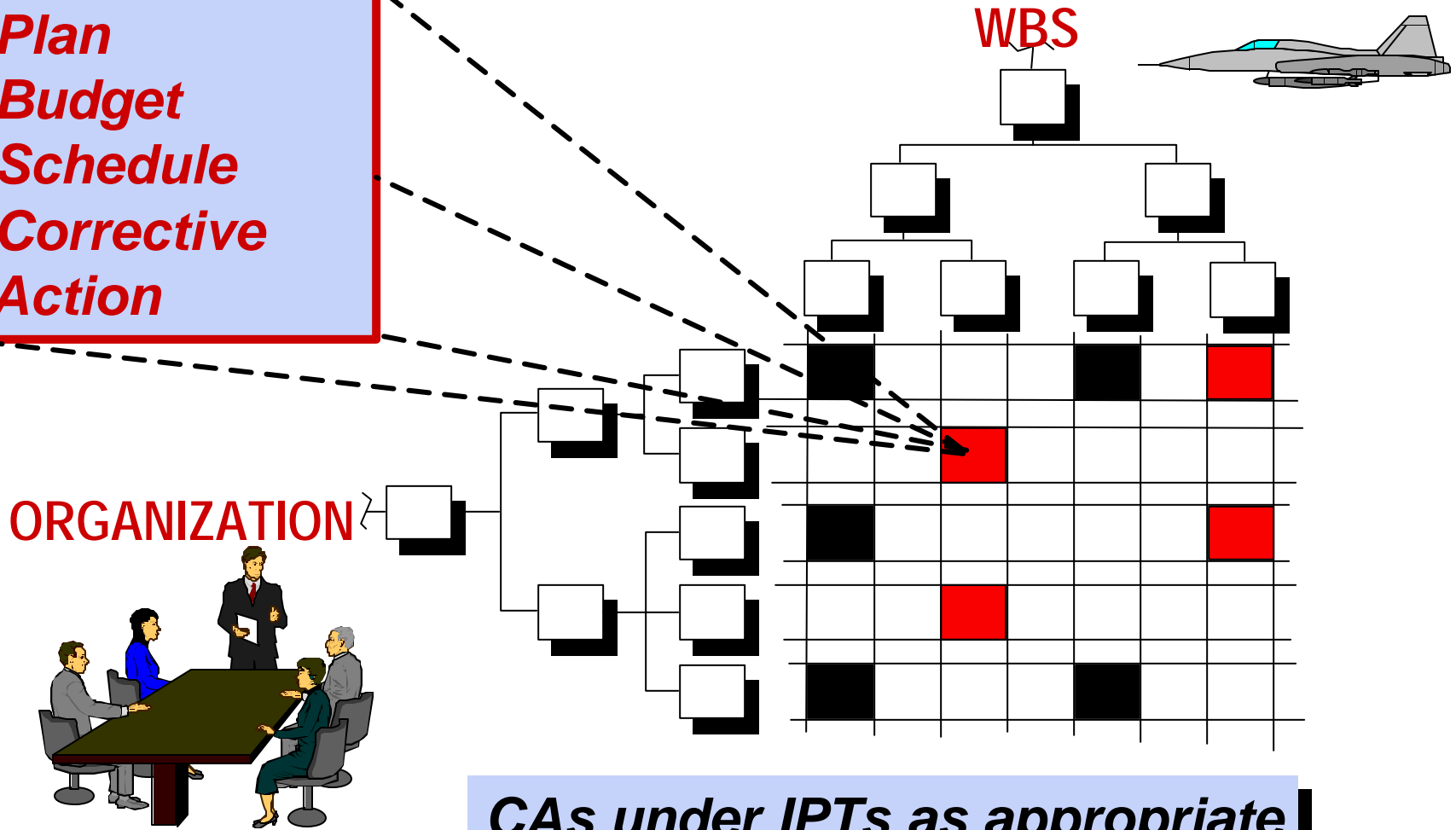
- **Model Program Objectives**
- **WBS**
- **IPTs**
- **Integrated Baseline Review (IBR)**
- **“Right Size” Reporting**
- **Integrated Digital Environment**
- **Training**

# Work Breakdown Structure: The Key to Integration



# The Control Account: Where the Action is

- ***Plan***
- ***Budget***
- ***Schedule***
- ***Corrective Action***



***CAs under IPTs as appropriate***

# Reengineering EVM: Integrated Baseline Reviews

- Within 6 months of award

- Mutually understand plan

- ◆ Scope
  - ◆ Schedule
  - ◆ Resources
- } **Risk**

- Planning process vs. event

- PM leads

- ◆ EVM staff supports
- ◆ Management system reviews effectively eliminated

IBR Training

- Schedules
- Mgmt. Systems



# **Growing Consensus:**

## **Gov't/Industry Best Practice**

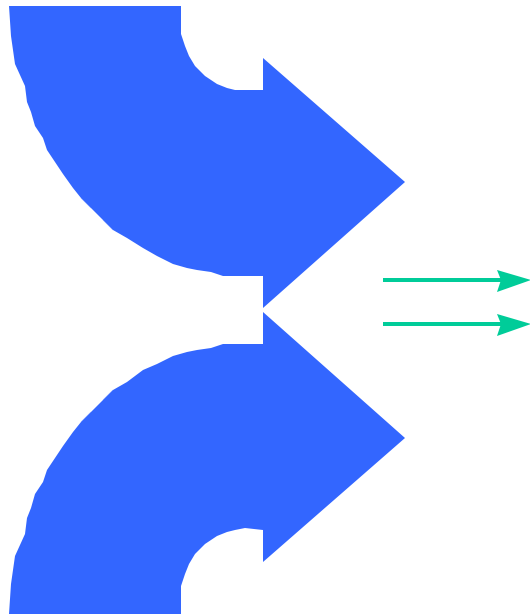
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- **Dec. '96 DoD accepted industry EVMS guidelines as C/SCSC replacement**
- **Reserved right for government reviews**
  - ◆ **As determined by project manager**
  - ◆ **"Self-certification" not in public interest**
- **Encouraged "true" standard**
  - ◆ **ANSI/EIA 748-98 EVMS issued in 1998**
  - ◆ **DoD and industry EVMS criteria are equal**
  - ◆ **International discussions - Australia, Canada, UK, US**



# Earned Value Management: Origins

Industry Best  
Practices



Government  
Requirements

1967: DoD Instruction 7000.2

**CANCELED**

*Criterion-based Management*

- Brief statements of attributes
- Not “how-to manage”
- Not a system
- Minimum acceptable standard

1997: DoD Regulation 5000.2-R  
**32 Earned Value Management  
Systems (EVMS) Criteria**

# DoD Since 1993... Results!

## ● DoD EVM

- ◆ Value reaffirmed
- ◆ Shifted to Industry; DCMC Exec. Agent
- ◆ OMB policy
- ◆ Trilateral MoU
- ◆ Intl. Perf. Mgmt. Council
- ◆ Commercial
- ◆ In-house
- ◆ Prof. associations
- ◆ Adopted by NASA, FAA, NRO, FBI, CoE
- ◆ Enterprise-wide
  - Boeing
  - Raytheon
  - Lockheed Martin
  - and others...
- ◆ No major surprises

**Aggregate overrun 5.5% (\$1.2B on \$72.8B; 66% comp.)**

# They're even doing it in industry!

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- **Industry**

- ◆ Boeing Defense & Space Group
- ◆ Lockheed Martin Sunnyvale
- ◆ McDonnell Douglas
- ◆ Motorola Iridium <sup>tm</sup>
- ◆ Navistar
- ◆ Delta Airlines
- ◆ Delco Electronics
- ◆ Industry "Standard"
  - ANSI

- **Project Management Institute**



# In-house Workshop Tasks

## My Opinions

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- **Validation & Surveillance**

- ◆ Policy changes?
- ◆ Who performs?

- **Implementation**

- ◆ Can in-house meet all 32 criteria?

- **Accounting Systems**

- ◆ Are DoD, non-CAS systems compliant?

- **Data Analysis & Training**

- ◆ Do PMs need EV data?

# Earned Value Management Systems

## Basic requirements

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- **COMPREHENSIVE PLANNING PROCESS**
  - ◆ Covers entire statement of work
  - ◆ Schedules activities
  - ◆ Allocates resources
- **FULLY INTEGRATED MANAGEMENT SYSTEMS**
  - ◆ Scheduling systems integrated with one another, and with work authorization system, accounting system, MRP, work measurement system, etc. For example:
    - Interdependencies between department, functional, and/or IPT schedules (horizontal integration)
    - Interdependencies from lowest level to master schedule (vertical integration)

# VISION

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**The quality of a contractor's management system  
is determined not by the absence of defects,  
but by the presence of management value**

# **NAVAL AVIATION SYSTEMS TEAM**



**Earned Value Management  
in the Naval Aviation Depot Environment**



# Why Earned Value Management?

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- AIR-00 Monthly Question “How are we doing?” i.e. Aircraft Deliveries to the Fleet Customer
- Current Metrics
  - “Reporting of History”
    - Financial Completions, months past delivery
- Future Metrics
  - “Reporting In Process Status and Projecting the Final Outcome.”
    - Forecast future deliveries based EAC calculations



## EVM Recipe for Success

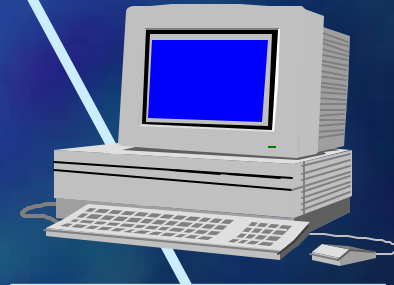
**NAVAIR  
Business Process  
Reengineering  
(BPR)**



**Business Processes**



**Organization  
Relationships**



**Information  
Technology**





# Business Processes

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- Challenge of changing processes
  - How to move from “As Is” to “To Be”?
  - “As Is”
    - Functional stovepipes focused on sub-optimized processes
    - “We’ve always done it this way”!
  - “To Be”
    - Integrated
      - PLANNING
      - SCHEDULING
      - EXECUTION
      - PERFORMANCE MEASUREMENT



# Organization Relationships

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- Eliminate functional stovepipes
- Establish independent profit & loss cost centers
  - By product line, by NAVAIR IPT
  - Process Centric (EVM/ABM)
  - Single Project Manager
  - Budget Authority
  - Negotiated resources





# Information Technology

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## ■ Current Environment

- Multiple Project Management Tools
- No functional baseline or standards
- Emotional ties to favorite software

## ■ Changes

- Single set of software tools
- Allocated functional baseline
- Standard data and reporting



# Conclusion

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- Change management
  - Significant effort expended on changing:
    - Minds
    - Attitudes
    - Shifting organizational behavior
  - *It's more emotional than technical*



*“Strangely enough, this is the past  
that somebody in the future is  
longing to go back to.”*



***OSD***  
***In-House***  
***Earned Value Management***  
***Workshop***  
***22 - 23 June 1999***



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- **EVM In-House Workshop Findings**
- **Lessons Learned**
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  - **System Validation**
  - **System Certification**
  - **System Surveillance**
  - **Training**
  - **Government Accounting**
    - **Management Information System**
- **Workshop Recommendations**

# ***EVM In-House Workshop Findings***



- **EVM implementation within DoD further along than perceived**
- **Direction reaffirmed**
  - **Need to Clarify In-House effort**
    - **DODI 5000.2R**
    - **Update EVMIG**
- **System validation not mandatory for EVM implementation**
- **Standard tool set recommended**





# ***Lessons Learned Implementation Considerations***

- 1. Insufficient implementation guidance on EVM**
  - Culture change required.**
  - How to fund implementation.**
- 2. Education and training**
  - Funds vs. budget**
- 3. Timing of funding**
- 4. Need contract / work authorization document.**
- 5. Modifying legacy system may not be the way to go.**
- 6. “Customer Management”/Baseline Management**
  - PEO/PMO must change how business is transacted**
- 7. Management Incentives**



# ***Lessons Learned System Validation***

- **Must comply with 32 criteria**
- **Must have DoD acceptance**
  - **DCMC: Validating Agent**
    - **Limited resources focused on contractors**
  - **Buying Command: No authority**



# ***Lessons Learned System Certification***



- **Must comply with 32 criteria**
- **DoD Acceptance not required**
  - **Buying Command can be Certifying Agent**
    - **Certification valid only within component**
  - **DCMC: Consultant**



# ***Lessons Learned System Surveillance***

- **Self Surveillance**
  - **In-House staff: Primary responsibility**
  - **PEO / Program Office Staff: As required**
  - **DCMC Assistance: Upon request**
- **Types of surveillance:**
  - **Program**
  - **System**
    - **SPC metrics - “system health analysis”**



# ***Lessons Learned Training***

- **Target audiences**
  - No “one size fits all”
  - Integrate training
    - Scope, schedule, budget/funds
- **Web-based and on-site instruction**
- **Train the trainers**
- **Procedural training**
- **On the Job**
- **Continuing education**



# ***Lessons Learned Government Accounting***

- **Intent of EVM Accounting Criteria based on compatibility with DoD Directive 5000.1b**
- **Accounting system acceptance subject to certification vs. validation requirements**

## **DoD Directive 5000.1b**

### **g. Management Control**

**...”In implementing internal management control systems, managers should focus on results not process.”**

# ***Lessons Learned Government Accounting***



- **Budget vs. Costs**
  - **Must separate revenue (funding document) from expense (project costing)**
  - **Color of money doesn't affect scope**
  - **May be helpful to keep revenues at summary level in accounting interface**
- **Materials**
  - **WIP: Cannot usually pull ACWP from financial system -- parts purchase doesn't equal parts usage**
  - **Must use estimations of issuance or track on shop floor**



# ***Lesson Learned Management Information System***

- **Accounting system must have three purposes**
  - **Data Storage / Accounting Interface**
    - **Incremental vs. cumulative**
    - **By element of cost**
    - **Data accessible at least monthly**
  - **Job Cost Accounting**
  - **Financial Management**
    - **Project Actuals**
    - **Funds / Revenue**



# *Lesson Learned*

## *Management Information System*

- **Recommended Process Owners**

<b><u>Function</u></b>	<b><u>Belongs to</u></b>	<b><u>Influenced by</u></b>
<b>Data Storage / Accounting Interface</b>	<b>Comptroller</b>	
<b>Job Cost Accounting</b>	<b>Comptroller</b>	<b>Project Manager</b>
<b>Financial Management</b>		
<b>Project Expenses</b>	<b>Project Manager</b>	
<b>Funds/Revenue</b>	<b>Project Manager</b>	<b>Comptroller</b>



# ***Workshop Recommendations***

- 1. Form PMAC Working Group to resolve Depot and Logistics issues.**
- 2. Need OSD “In-House” Web Site/Deskbook Reference**
  - Best Practices**
  - Lessons Learned**
    - POC: Type of Effort, Location, Office, Phone No, E-mail**
  - Training References**
  - Tool Sets**





# NADEP Jacksonville Earned Value

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# NADEP Jacksonville Earned Value

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- The Naval Aviation Depot is an industrial facility within the NAVAIR corporation
- “Depot” level rework is performed on aircraft, engines and components



# NADEP Jacksonville Earned Value



Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

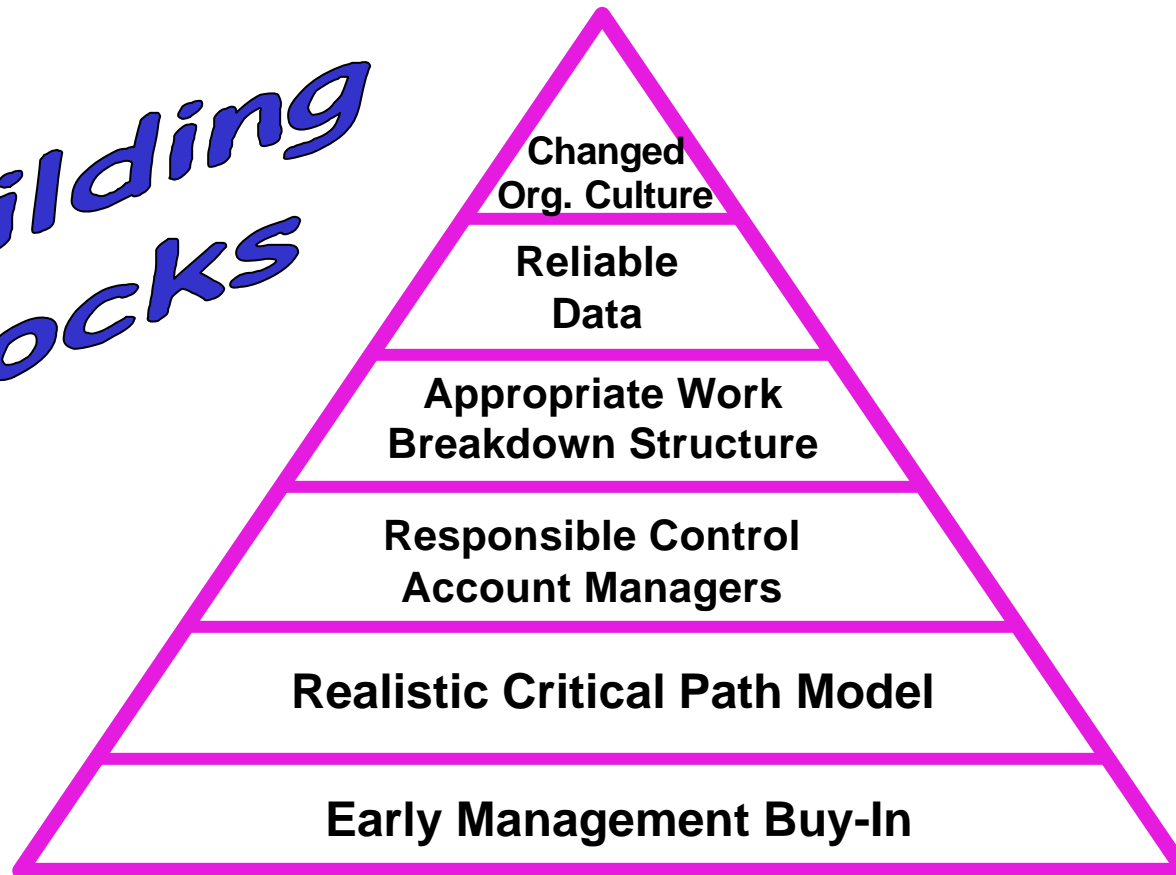




# NADEP Jacksonville Earned Value



*Building  
Blocks*

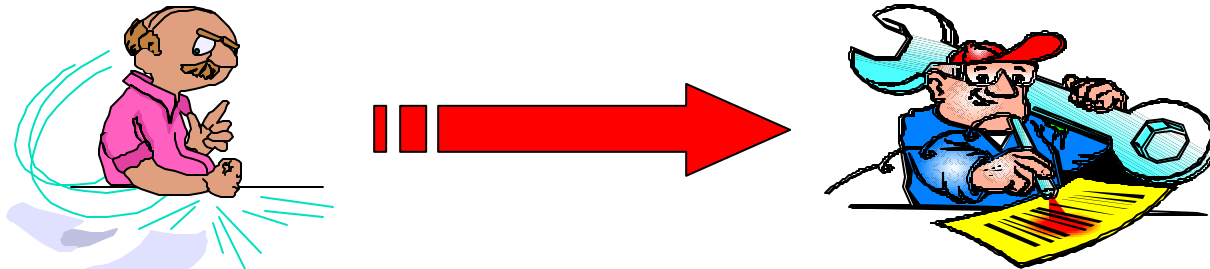




# NADEP Jacksonville Earned Value



- *Early Management Buy-In*
  - Understanding. . .
    - what EV is and the benefits
    - the process and resource requirements
    - customer requirements
    - the integration with other management initiatives





# NADEP Jacksonville Earned Value



## Current Environment

**Earned Value**

**Tailored Pricing/  
Scheduling**

**CA  
Studies**

- Matl Mgmt
- Admin
- Tech Data

**ERP**

**MRPII**

**BPR**

- Matl Mgmt
- Planning/  
Scheduling

**ISO  
9000**

## Daily Operations

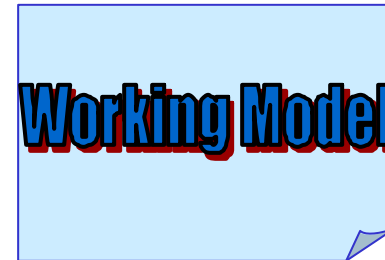
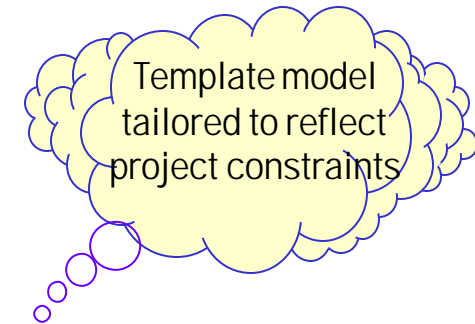


# NADEP Jacksonville Earned Value



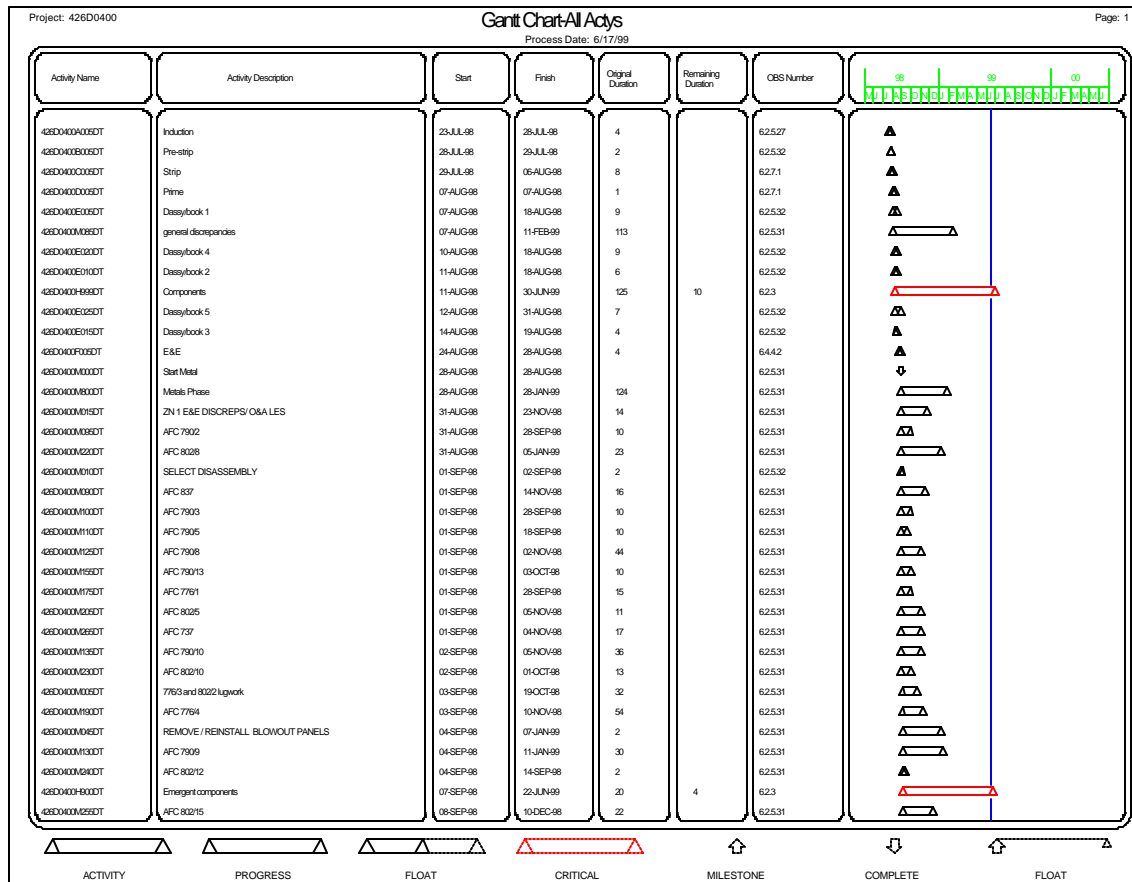
- *Realistic Critical Path Model*

- Measurable activities which relate to the work to be accomplished
- Production input
- Relationships drive the schedule





# NADEP Jacksonville Earned Value



Time-  
Phased





# NADEP Jacksonville Earned Value



- *Responsible Control Account Managers*



**Responsible Organization**  
(General Foreman)

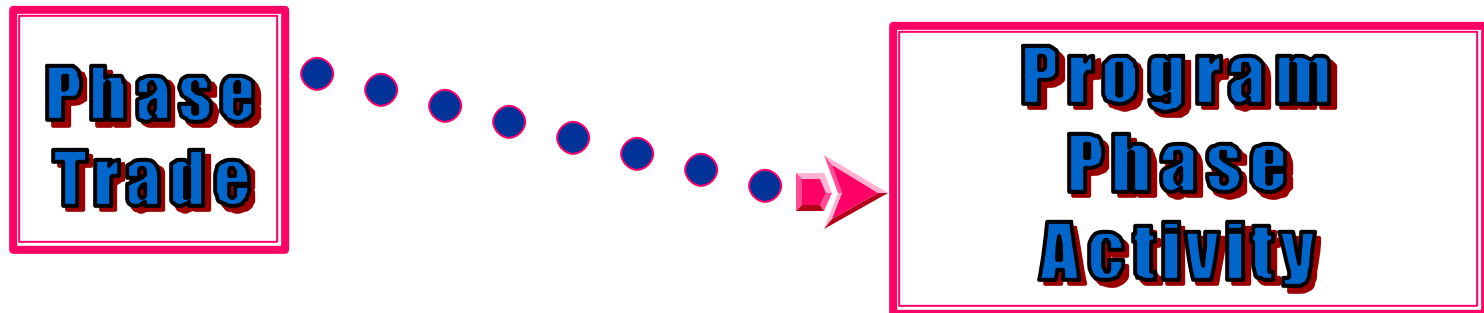
- Performing Organization #1
- Performing Organization #2



# NADEP Jacksonville Earned Value



- *Appropriate Work Breakdown Structure*
  - Must relate to production-based activities





# NADEP Jacksonville Earned Value



Meaningful  
Variance  
Analysis

**Dekker TRAKKER ABCMS**

File Edit View Tools Options Forms Help

426D0400 (None)

**Report Designer - trk22492.frx - Page 1**

Project: 426D0400  
Report Name: ODC UNIVAR/A  
Planned By: LCDR STERRETT

**Cost Cumulative Variance  
DETAILED VARIANCE (\$\$\$)**

Run Date: 09/21/1999  
Run Time: 15:50  
Status Date: 09/17/1999  
Form: R650000

Summary Key	BCWS	BCWP	ACWP	Schedule Variance	Cost Variance	Budget At Completion	Estimate At Completion	Variance
426D04000050T Induction	\$1,757	\$0,000	\$0,000	\$1,757	\$1,757	\$1,757	\$1,757	\$0,000
426D04000050T Pre-Ship	\$0,000	\$0,000	\$0,000	\$0,000	\$0,000	\$0,000	\$0,000	\$0,000
426D04000050T S/M	\$0,000	\$0,000	\$0,000	\$0,000	\$0,000	\$0,000	\$0,000	\$0,000
426D04000050T Prime	\$1,500	\$1,500	\$1,500	\$0,000	\$0,000	\$1,500	\$1,500	\$0,000
426D04000050T Dassybook 1	\$21,219	\$20,459	\$115,000	\$-780	\$-93,541	\$21,219	\$115,000	\$-93,780
426D040000100T Dassybook 2	\$10,791	\$10,791	\$10,791	\$0,000	\$0,000	\$10,791	\$10,791	\$0,000
426D040000150T Dassybook 3	\$0,249	\$0,249	\$0,249	\$0,000	\$0,000	\$0,249	\$0,249	\$0,000
426D040000200T Dassybook 4	\$15,300	\$15,300	\$15,300	\$0,000	\$0,000	\$15,300	\$15,300	\$0,000
426D040000250T Dassybook 5	\$2,447	\$2,447	\$2,447	\$0,000	\$0,000	\$2,447	\$2,447	\$0,000
426D04000050T ESE	\$24,377	\$14,789	\$24,385	\$-9,588	\$-9,596	\$24,377	\$24,385	\$-8
426D040000020T Discrepancies	\$10,790	\$10,790	\$10,790	\$0,000	\$0,000	\$10,790	\$10,790	\$0,000
426D040000050T Sbsst/Fin/Rudders	\$12,000	\$12,000	\$12,000	\$0,000	\$0,000	\$12,000	\$12,000	\$0,000
426D040000070T Assy - Emergent	\$4,000	\$4,000	\$4,000	\$0,000	\$0,000	\$4,000	\$4,000	\$0,000
426D040000100T Engine Bay/Spansons	\$12,515	\$12,515	\$12,515	\$0,000	\$0,000	\$12,515	\$12,515	\$0,000
426D040000150T Hydraulic/Speed Bra	\$4,702	\$4,702	\$4,702	\$0,000	\$0,000	\$4,702	\$4,702	\$0,000
426D040000200T Landing Gear	\$115,770	\$115,770	\$115,770	\$0,000	\$0,000	\$115,770	\$115,770	\$0,000
426D040000250T Wings/Birdcages	\$12,125	\$12,125	\$12,125	\$0,000	\$0,000	\$12,125	\$12,125	\$0,000
426D040000300T Gun/Drum	\$1,517	\$1,517	\$1,517	\$0,000	\$0,000	\$1,517	\$1,517	\$0,000
426D040000350T Ramps/Cloak Vanes	\$8,470	\$8,470	\$8,470	\$0,000	\$0,000	\$8,470	\$8,470	\$0,000
426D040000400T BCS	\$24,570	\$24,570	\$24,570	\$0,000	\$0,000	\$24,570	\$24,570	\$0,000
426D040000450T LO Ops/Engines	\$82,110	\$82,110	\$82,110	\$0,000	\$0,000	\$82,110	\$82,110	\$0,000
426D040000500T Cockpit Installs I	\$11,770	\$11,770	\$11,770	\$0,000	\$0,000	\$11,770	\$11,770	\$0,000
426D040000540T SMD Lines	\$14,940	\$14,940	\$14,940	\$0,000	\$0,000	\$14,940	\$14,940	\$0,000
426D040000550T Cockpit Installs II	\$0,000	\$0,000	\$0,000	\$0,000	\$0,000	\$0,000	\$0,000	\$0,000

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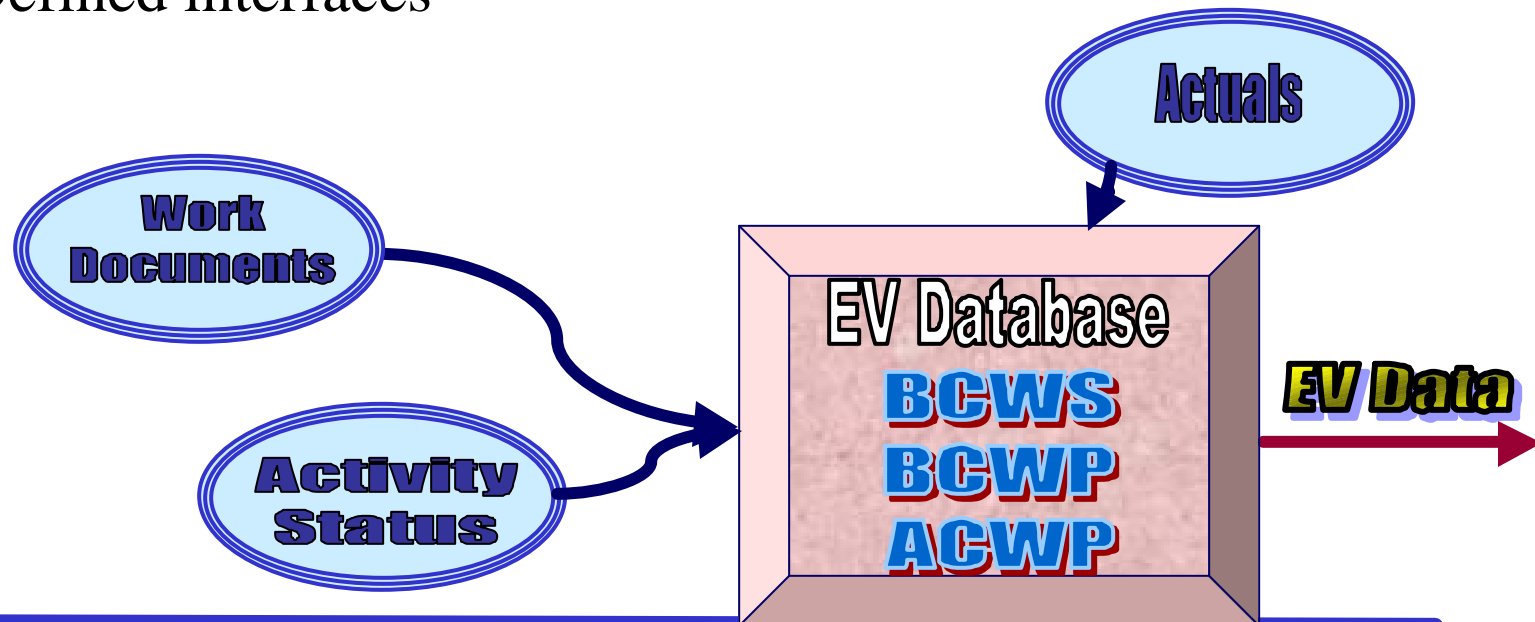


# NADEP Jacksonville Earned Value



- *Reliable Data*

- Centralized EV data
- Defined interfaces
- Timeliness required to manage proactively



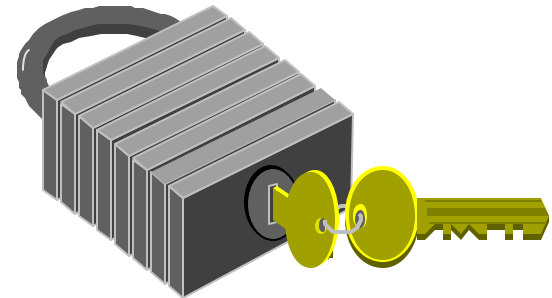


# NADEP Jacksonville Earned Value

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- *Changed Organizational Culture*
  - Accepted management tool
  - Production floor buy-in
    - CPM Model
    - Variance Analysis at a meaningful level

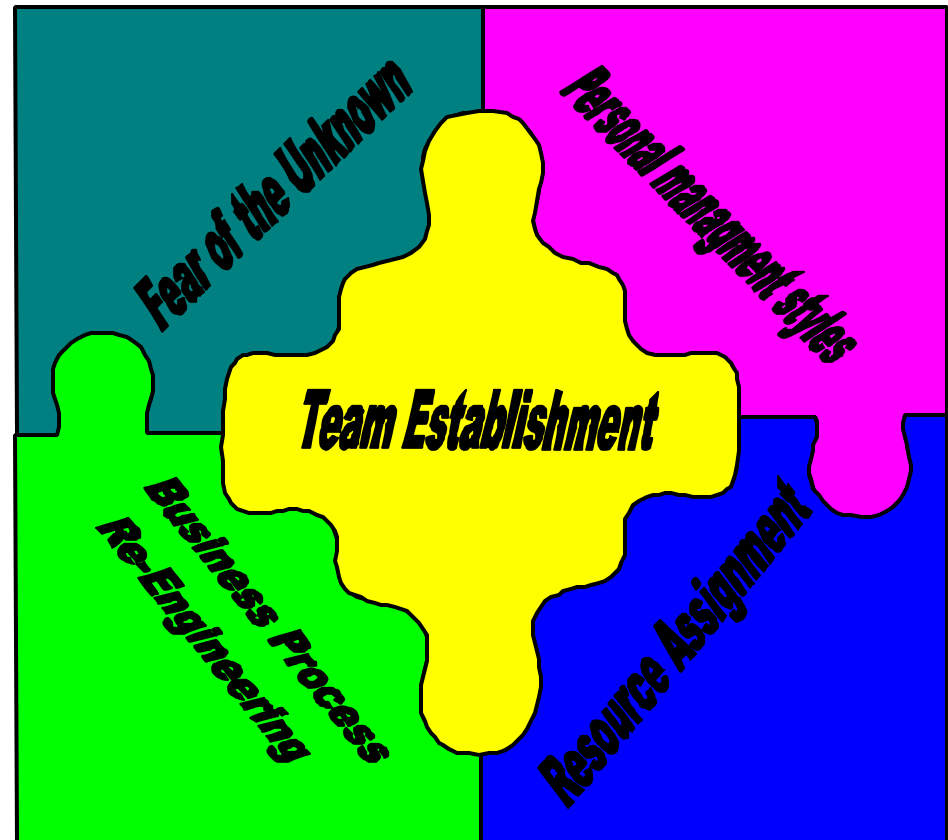




# NADEP Jacksonville Earned Value

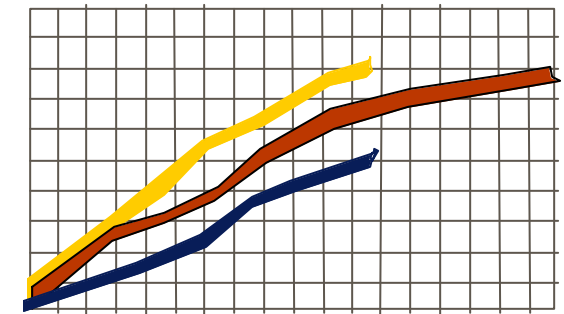
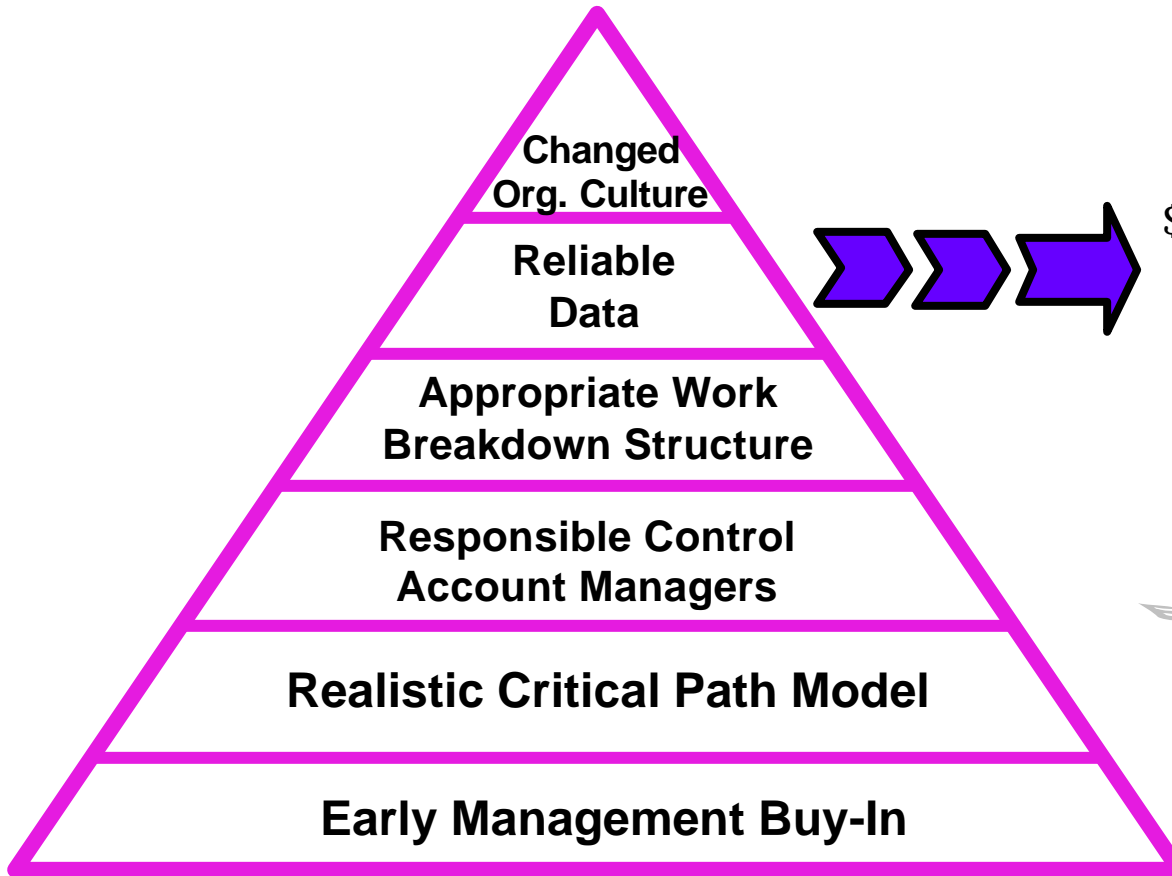


- Evolving process
  - Fear of the unknown
  - Adapting to personal management styles
  - Business Process Re-Engineering
  - Resource assignment
  - Team establishment





# NADEP Jacksonville Earned Value



Earned Value  
Management





# NADEP Jacksonville Earned Value

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# **IN-HOUSE (GOVERNMENT) EVMS WORKSHOP**

## **VALIDATION & SURVEILLANCE**

**Mr. William “Bill” Gibson**

**Mr. Dominic A. “Chip” Thomas**



# IN-HOUSE (GOVERNMENT) EVMS WORKSHOP

## VALIDATION

- **WHY VALIDATE/CERTIFY**
  - **WHO PAYS THE COST**
    - **FACILITY SHOULD PAY**
    - **CUSTOMER SHOULD PAY**
  - **NAVAIR 6.0 WILLING TO PAY FOR IMPLEMENTATION**
    - **WILL NOT PAY FOR CERTIFICATION**
  - **ALBANY WANTS CERTIFICATION FOR COMPETITIVE ADVANTAGE**
- **WHO DOES IN-HOUSE VALIDATION**
  - **NO AUTHORIZATION FOR DCMC**
  - **COULD FALL TO BUYING COMMAND**
    - **IF BUYING COMMAND DOES REVIEW, DCMC MAY LOOK AT FINAL REPORT AND VALIDATE IF NEED BE**



# IN-HOUSE (GOVERNMENT) EVMS WORKSHOP

## • **VALIDATION:** (continued)

- **NO CONSENSUS FOR LESS THAN FULL ACCEPTANCE**
  - **ALL 32 CRITERIA OR NOTHING**
- **NAVAIR HAS SIGNED FOR ACCEPTANCE AND WILL CONTINUE TO SIGN FOR NON-DOD ACCEPTANCE**
  - **FOR SERVICE ONLY ACCEPTANCE**
- **DCMC ONLY ONE TO SIGN FOR DOD ACCEPTANCE**
- **LESSONS LEARNED:**
  - **CAREFULLY EVALUATE IF FULL DOD VALIDATION IS NECESSARY**
  - **THERE IS MORE THAN ONE WAY TO ACHIEVE VALIDATION**



# IN-HOUSE (GOVERNMENT) EVMS WORKSHOP

## • SURVEILLANCE

- **DECIDE EARLY HOW SURVEILLANCE WILL BE ACCOMPLISHED**
  - **ALBANY DECIDED EARLY TO USE IN-HOUSE STAFF**
  - **AT THIS TIME DCMC NOT AUTHORIZED FOR IN-HOUSE SURVEILLANCE**
- **APPROACHES TO ACCOMPLISH SURVEILLANCE**
  - **COULD INCLUDE USE OF METRICS**
  - **UTILIZE IN-HOUSE STAFF**
  - **UTILIZE PROGRAM OFFICE STAFF**
- **BEST PRACTICE**
  - **USE IN-HOUSE STAFF WITH PMO/PEO INVOLVEMENT**



# **IN-HOUSE (GOVERNMENT) EVMS WORKSHOP**

## **VALIDATION & SURVEILLANCE**

**Mr. William “Bill” Gibson**

**Mr. Dominic A. “Chip” Thomas**



# IN-HOUSE (GOVERNMENT) EVMS WORKSHOP

- Short History of EVMS Validation/Surveillance
- Review all Government plans to complete effort
  - General Order Summary
  - Organization and WBS Structure
  - Responsibility Assignment Matrix
  - Work Authorization Documents
  - Network/Program Schedules
  - Earned Value Methods
  - Cost Account Plans
  - Baseline Maintenance
- How do we do this?
  - CONCERNS:
    - Categorize Concerns



# IN-HOUSE (GOVERNMENT) EVMS WORKSHOP

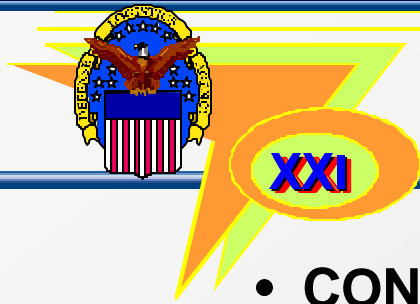
- **CONCERNS:** (continued)
- **Evaluation Events:**
  - **Will All Criteria Be Reviewed?**
    - Incremental Visits
    - As Subsystems Compliance is Completed
    - Full Demonstration
      - When Will They be Ready to Demonstrate
    - Will an IBR be Part of the Process
      - Can IBR be Part of a Demonstration
- **Accounting - Will DCAA be involved????**
  - Recognized, Acceptable, Costing Techniques



# IN-HOUSE (GOVERNMENT) EVMS WORKSHOP

- **CONCERNS: (continued)**
- **Material Accounting System - Does It Provide For:**
  - **Accurate Cost Accumulation**
  - **Assignment of Costs to Control Accounts in a Manner Consistent with the Budget**
  - **Cost Performance Measurement at a Point of Time Suitable for Material Involved**
  - **Full Accountability of all Material**
- **Analysis and Management Reports:**
  - **Will Monthly Data/Information be Generated at the Control Account Level**
  - **Will Data be Actual Cost Data from the Accounting System**
  - **What Time Frame can this be Expected**





# IN-HOUSE (GOVERNMENT) EVMS WORKSHOP

- **CONCERNS:** (continued)
- **Revisions and Data Maintenance:**
  - Will Authorized Changes be Incorporated in a Timely Manner?
  - Will Retroactive Changes be Controlled?
  - Prevent Revisions to the Program Budget Except for Authorized Changes
  - Insure All Changes Are Documented ( UB & MR)
- **Surveillance**
  - How Will It Be Accomplished?
    - Who Will Accomplish System Surveillance?
    - Who Will Accomplish Program Surveillance?
    - Will DCAA do Accounting Surveillance?



# IN-HOUSE (GOVERNMENT) EVMS WORKSHOP

- **CONCERNS:** (continued)
- **Data/Information Required:**
  - Will a Detail Presentation of Their Management System be Required?
  - Will Compliance with All 32 Criteria be Required?
  - What Monthly Reports Will Be Required



# IN-HOUSE (GOVERNMENT) EVMS WORKSHOP

## **DCMC HQ, Ft. Belvoir, VA**

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EVMS Center Hotline

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Homepage - <http://evms.dcmdw.dla.mil>

IN-HOUSE EVM WORKSHOP  
22-23 JUNE 1999

ANALYSIS AND TRAINING  
ISSUES AND RECOMMENDATIONS

- ANALYSIS:

1. ISSUE – Level of WBS?

RECOMMENDATION – Depends on level of management. Starts where work is performed and up.

2. ISSUE -- Depot Level Managers not requiring and using EVM information to manage.

RECOMMENDATION – Provide Integrated EVM Education and Training (see Training issue # 1).

3. ISSUE – All EVM customers are not recognized. Example: Operational chain of command.

RECOMMENDATION – Recognize the value of EVM information for ALL customers.

- TRAINING:

1. ISSUE – Government Management incentives. Example: Expenditure Rates.

RECOMMENDATION – A. “Integrated” Training as to the interdependencies of funds, budget, and EVM information in our performance based disciplines.

Example: EVM information includes organization, work authorization, scheduling, planning and budgeting, accounting, performance status (technical, schedule and cost), and analysis – all indicative of budget and funds required for effort accomplished and effort remaining.

RECOMMENDATION – B. Workshops for Users and Customers.

ACTION: DSMC EVM CHAIR – Dave Melton

2. ISSUE – Workforce Education needs to be emphasized.

RECOMMENDATION – Obtain Continuing Education Units (CEU) endorsements from all functional boards. Examples include the BCFM, AMFB, SPRDE, etc.

ACTION: Joni Forman, OUSD(A&T)SA/PM

3. ISSUE – No “One Size Fits All”

RECOMMENDATION –

- A. Target audiences and issues  
(Identify Roles and Responsibilities)
- B. Provide Web Based Instruction, Schools, and On Site Training
- C. Train the Trainers
- D. Provide Procedural Training
- E. Provide One and One Training



# Government Accounting

- Purpose
  - Process Data and execute transactions
  - Track Expenditure of Appropriated Funds
  - Provide Management Information

# Government Accounting

- Structure
  - Data Processing - Centrally controlled DoD system managed by DFAS
  - Tracking Expenditure of Appropriated Funds – Decentralized
  - Management Information – Ad Hoc primarily related to funds tracking

# Government Accounting

- Governing Regulatory Requirements
  - Commercial Industry
    - Financial Standards Accounting Board (GAAP)
    - Internal Revenue Service - Tax Accounting
    - DoD - Cost Accounting Standards
  - Government Accounting
    - Appropriation Law and Regulation



# Government Accounting

DoD Directive 5000.1b

g. Management Control

.... **“ In implementing internal management control systems, managers shall focus on results, not process”**

# Government Accounting

- Intent EVM Accounting Criteria :
  - Record costs consistent with established budgets
  - Insure control of indirect costs
  - Insure disciplined accumulation of cost
  - Insure proper material accounting and performance application

# Government Accounting

## Issues:

- 1 Is the capability of the Government accounting system compatible with EVM Accounting criteria?
- 2 What specific accounting functions are necessary to provide management data?
- 3 How can Government facilities acquire the necessary accounting capability?
- 4 Who should be responsible for acquiring accounting capability?
- 5 Identify applicable accounting initiatives currently under way

# Government Accounting

## Summary of Issues:

- 1 Is the capability of the Government accounting system compatible with EVM Accounting criteria?

Yes, this team believed that Government accounting systems are compatible with meeting EVM criteria.

- 2 What specific accounting functions are necessary to provide management data?

A cost charging system that collects by budget element

Historical data storage system that can be accessed for periodic reporting

# Government Accounting

## Summary of Issues:

3 How can Government facilities acquire the necessary accounting capability?

- By working with the applicable personnel within a facility this capability can be developed, or
- Off line systems can be developed as a last resort

4 Who should be responsible for acquiring accounting capability?

Facility managers, comptrollers, information systems, and program managers must work together to develop this capability